

What is claimed is:

- 1. A pyrotechnic projectile comprising:**
 - a) a body,**
 - b) projectile GPS means for determining the position of the pyrotechnic projectile,**
 - c) a plurality of pyrotechnic sub-units disposed within the body, each of the sub-units comprising:**
 - i) sub-unit GPS means for determining the position of the sub-unit, and**
 - ii) ignition means for igniting the sub-unit when the position determined by the sub-unit GPS means corresponds to a pre-selected position, and**
 - d) ejection means responsive to the projectile GPS means for ejecting the plurality of sub-units from the body.**
- 2. The pyrotechnic projectile of claim 1 wherein at least one of the pyrotechnic sub-units further comprises (iii) maneuvering means for altering the velocity of the pyrotechnic sub-unit.**

3. A method of producing a firework pattern in the sky that comprises the steps of:

- a) selecting a plurality of GPS coordinates that together form a pattern,**
- b) launching a pyrotechnic projectile comprising:**
 - i) a body,**
 - ii) projectile GPS means for determining the position of the pyrotechnic projectile,**
 - iii) a plurality of pyrotechnic sub-units disposed within the body, each of the sub-units comprising**
 - (A) GPS means for determining the position of the pyrotechnic sub-unit, and**
 - (B) ignition means for igniting the pyrotechnic sub-unit when the position determined by the GPS means corresponds to one of the plurality of GPS coordinates forming the pattern, the GPS coordinate being associated with the pyrotechnic sub-unit, and**
 - iv) ejection means responsive to the projectile GPS means for ejecting the plurality of pyrotechnic sub-units from the body of the pyrotechnic projectile,**
- c) ejecting the plurality of pyrotechnic sub-units from the body of the pyrotechnic projectile, and**
- d) igniting each of the pyrotechnic sub-units when the position of the pyrotechnic sub-unit corresponds to the GPS coordinate associated with the pyrotechnic sub-unit.**

4. A method of producing an animated firework pattern in the sky that comprises the steps of:

- a) selecting a plurality of GPS coordinates that together form a pattern and a plurality of flight paths each originating at one of the plurality of GPS coordinates,**
- b) launching a pyrotechnic projectile comprising:**
 - i) a body,**
 - ii) projectile GPS means for determining the position of the pyrotechnic projectile,**
 - iii) a plurality of pyrotechnic sub-units disposed within the body, each of the sub-units comprising**
 - (A) GPS means for determining the position of the pyrotechnic sub-unit,**
 - (B) ignition means for igniting the pyrotechnic sub-unit when the position determined by the GPS means corresponds to one of the plurality of GPS coordinates forming the pattern, the GPS coordinate being associated with the pyrotechnic sub-unit, and**
 - (C) maneuvering means for altering the velocity of the pyrotechnic sub-unit, and**
 - iv) ejection means responsive to the projectile GPS means for ejecting the plurality of pyrotechnic sub-units from the body of the pyrotechnic projectile,**
- c) ejecting the plurality of pyrotechnic sub-units from the body of the pyrotechnic projectile,**
- d) igniting each of the pyrotechnic sub-units when the position of the pyrotechnic sub-unit corresponds to the GPS coordinate associated with the pyrotechnic sub-unit, and**
- e) maneuvering each of the pyrotechnic sub-units along the flight path originating from the GPS coordinate associated with the pyrotechnic sub-unit.**